Application No. 10/564,423 Reply to Office Action dated January 7, 2009

Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) A method of transmitting data between a transmitter and a receiver, the method comprising:

transmitting, by the transmitter, a data packet onto multiple paths of a wireless network between the transmitter and the receiver, at least one of the paths including at least one repeater transceiver node;

forwarding, by the at least one repeater node, the data packet to the receiver and storing, by the at least one repeater node, a copy of the forwarded data packet;

issuing a no-acknowledge (NACK) signal over the network, by the receiver, if the data packet is not properly received by the receiver; and

initiating retransmission of the data packet onto the network by the at least one repeater node responsive to receipt of the NACK signal by the at least one repeater node, the at least one repeater node initiating retransmission of the data packet by transmitting the stored copy of the forwarded data packet to the receiver.

- 2. (Previously Presented) The method of claim 1 wherein said retransmission is effected by all repeater nodes that forwarded the data packet and that receive the NACK signal.
- 3. (Previously Presented) The method of claim 1 wherein said retransmission is effected by said at least one repeater node and the transmitter.
- 4. (Previously Presented) The method of claim 1 wherein the transmitter does not retransmit the data packet if the receiver issues the NACK signal.

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- 5. (Previously Presented) The method of claim 4 wherein the transmitter does not listen for NACK signals relating to its own transmitted data packets.
- 6. (Previously Presented) The method of claim 1 wherein said retransmission of the data packet onto the network by the at least one repeater node includes using multiple paths available from the repeater node to the receiver.
- 7. (Previously Presented) The method of claim 1, further including the receiver issuing an acknowledge (ACK) signal in the event that the data packet is correctly received by said receiver, the at least one repeater node forwarding the ACK signal to the transmitter.
- 8. (Previously Presented) The method of claim 1, further including retransmitting the data packet, by the repeater node, after a first retransmittal interval if no ACK or NACK signal is received with respect to said forwarded data packet.
- 9. (Previously Presented) The method of claim 8, further including the transmitter retransmitting the data packet after a second retransmittal interval if no ACK signal is received, the second retransmittal interval being greater than the first retransmittal interval.
- 10. (Currently Amended) A repeater node to forward data packets, received from a transmitter node, to a receiver node that is an end destination of the packets, in a wireless network, the repeater node comprising:

a receive <u>module circuit</u> to receive data packets originating from the transmitter; a transmit <u>module circuit</u> to forward the data packets to another node in the network;

a pending packet buffer to store copies of the forwarded data packets; and
a retransmission module control circuit to initiate retransmission over the network
of data packets of previously forwarded data packets for which no-acknowledge (NACK) signals

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are received, responsive to the NACK signals being received by the repeater node, the retransmission module being adapted control circuit configurable to initiate retransmission of the data packets for which NACK signals are received by transmitting the stored copies of these data packets.

- 11. (Currently Amended) The repeater node of claim 10, further including a purge module circuit to remove a stored data packet from the pending packet buffer responsive to an acknowledge (ACK) signal being received with respect to that data packet.
- 12. (Currently Amended) The repeater node of claim 10 wherein the retransmission module control circuit is adapted configurable to transmit the data packets over all available paths.
- 13. (Currently Amended) The repeater node of claim 10, wherein the repeater node is adapted configurable to forward ACK signals to the transmitter and not to forward NACK signals to the transmitter.
- 14. (Currently Amended) The repeater node of claim 10 wherein the retransmission module control circuit is adapted configurable to retransmit the data packets after a first retransmittal interval when no corresponding ACK or NACK signal is received.
- 15. (Currently Amended) A wireless network of communicating nodes, the network comprising:

a transmitter node, a receiver node and at least one repeater node to forward data packets, received from the transmitter node, to the receiver node that is an end destination of the data packets, the at least one repeater node including:

a receive <u>module circuit</u> to receive the data packets originating from the transmitter;

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a transmit module circuit to forward the data packets to another node in the network;

a pending packet buffer to store copies of the forwarded data packets; and a retransmission module control circuit to initiate retransmission, over the network, of data packets of previously forwarded data packets in response to receiving no-acknowledge (NACK) signals, the retransmission module being adapted control circuit configurable to initiate retransmission of the data packets of the previously forwarded data packets by transmitting the stored copies of these data packets.

- 16. (Currently Amended) The network of claim 15 wherein the retransmission-module control circuit, in the repeater node, is adapted configurable to retransmit the data packets after a first retransmittal interval when no corresponding ACK or NACK signal is received.
- 17. (Currently Amended) The network of claim 16 wherein said transmitter node is adapted configurable to retransmit the data packets after a second retransmittal interval that is longer than the first retransmittal interval, when no corresponding ACK or NACK signal is received.
- 18. (Previously Presented) The network of claim 15, wherein the transmitter node does not retransmit data packets in response to receiving the NACK signals.
- 19. (Previously Presented) The network of claim 15, wherein the transmitter node does not listen for NACK signals relating to its own transmitted data packets.